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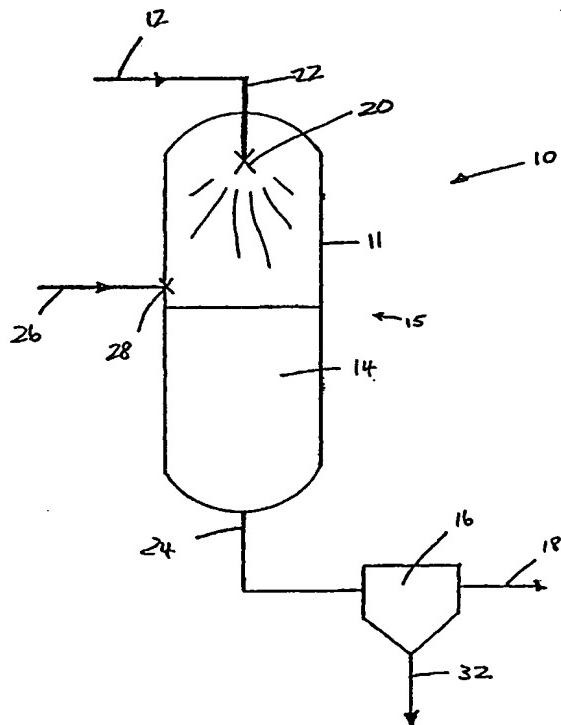
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(54) Title: PROCESS AND DEVICE FOR PRODUCTION OF LNG BY REMOVAL OF FREEZABLE SOLIDS



WO 03/062725 A1



(57) Abstract: Novel processes and devices for the removal of freezable species such as carbon dioxide, water and heavy hydrocarbons from a natural gas feed stream during liquefaction to produce LNG are disclosed. The freezable species are able to be removed as a solid, avoiding the costly step of pre-treatment to remove the freezable species from the natural gas feed stream prior to the liquefaction stage. The freezable species may be removed on a continuous basis being separated as solids following liquefaction of the natural gas feed stream with subsequent separation of the solids. The solid freezable species may then be liquefied on a continuous basis if required with natural gas recycled to the process. Continuous removal of the freezable species from the natural gas feed stream is achievable by maintaining cooling and separation apparatus at the same working pressure. Advantageously, at least part of the cooling vessel is constructed from a material having a low thermal conductivity which discourages formation of the solids of the freezable species on the walls of the cooling vessel.